REMARKS

Upon entry of the attached amendments, claims 16 - 30 are pending in the application. Claims 1 - 15 have been canceled without prejudice, waiver, or disclaimer. Claims 16, 17, 20, and 26 have been amended. The subject matter of amended independent claims 16, 20, and 26 is supported on page 1, lines 19 - 21 of Applicant's originally submitted specification. The amendment to claim 17 is made to remove a typographical error. Accordingly, no new matter is added.

Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I.   Objection to the Specification – Title

The Office Action alleges that the title is not descriptive of the application. Applicant has amended the title such that it reflects the subject matter of the pending independent claims. Accordingly, the objection to the title should be withdrawn.

II.   Objections to the Claims

The Office Action objects to claims 17 and 26 for informalities. Specifically, in claim 17 "and" should be "an," and in claim 26, "exception" should be "exceptional." Applicant has amended claims 17 and 26 to correct the informalities cited by the Office Action. Accordingly, the objections to claims 17 and 26 should be withdrawn.

III.   Claim Rejections Under 35 U.S.C. § 102 – Claims 20 - 30

A.   Statement of the Rejection

The Office Action indicates that claims 20 - 25 stand rejected under 35 U.S.C. § 102(e) over U.S. Patent 6,230,257 to Roussel *et al.* (*Roussel*). The Office Action further indicates that claims 26 - 30 stand rejected 35 U.S.C. § 102(b) over U.S. Patent 5,596,733 to Worley Jr. *et al.* (*Worley, Jr.*)

B.   Discussion of the Rejection

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior-art reference disclose each element, feature, or step of the claim. See *e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 USPQ2d 1129. (Fed.

Cir. 1988). Applicant's amended independent claims 20 and 26 include an element/feature that is not found in the respective references.

1. Claims 20 – 25

Specifically, concerning Applicant's amended independent claim 20, *Roussel* fails to disclose, teach, or suggest "using a miscellaneous logic unit configured to perform logical operations not requiring multiply accumulate functions to generate a plurality of control signals responsive to the first data value, the second data value, and an exceptional condition when identified by the MAC unit."

In contrast with Applicant's claimed method for performing single-instruction multiple-data instructions, FIGs. 4A, 4B, and 5 of *Roussel* appear to be directed to multiple accumulate functions exclusively. The execution units illustrated and described in association with FIG. 4A are ADD and MUL execution units (*Roussel*, column 4, lines 24 - 58). FIG. 5 and the related detailed description appear to indicate that execution units 130, 140 perform operations on the half width of operands retrieved from source registers. Execution units that perform ADD and MUL operations and execution units that perform operations on half width operands do not disclose, teach, or suggest Applicant's claimed feature of "using a miscellaneous logic unit configured to perform logical operations not requiring multiply accumulate functions to generate a plurality of control signals responsive to the first data value, the second data value, and an exceptional condition when identified by the MAC unit." Accordingly, Applicant's claimed method is allowable over *Roussel* and the rejection of claim 20 should be withdrawn.

Because independent claim 20 is allowable, dependent claims 21 - 25 are also allowable for at least the reason that these claims contain all the features of independent claim 20. *See In re Fine*, 837, F.2d 1071, 5 U.S.P.Q.2d 1596, 1598. (Fed. Cir. 1988). Accordingly, Applicant respectfully requests that the rejection of claims 21 - 25 also be withdrawn.

2. Claims 26 – 30

With regard to Applicant's amended independent claim 26, *Worley, Jr.* fails to disclose, teach, or suggest "means for producing (a plurality of control signals) configured to perform logical operations not requiring multiply accumulate functions."

In contrast with Applicant's claimed apparatus configured to perform single-instruction multiple-data instructions, FIG. 8 of *Worley, Jr.* apparently shows a multiplexer (174) and a storage table (178) coupled between a functional unit (180) and an instruction results bus (178). The related description explains that multiplexor (174) selects between a value presented at output port (198) (of functional unit A) as the result of an instruction executed by the functional unit (180) and a default value from the storage table (176). The chosen value depends on whether the executed instruction produced an exception for which a default value has been previously stored. (*Worley, Jr.*, column 10, lines 21 - 27.) A multiplexor and a storage unit as illustrated and described in association with FIG. 8, which apparently describe a conditional selection of one of two values, does not disclose, teach, or suggest Applicant's claimed "means for producing configured to perform logical operations not requiring multiply accumulate functions." Accordingly, Applicant's claimed apparatus is allowable over *Worley, Jr.* and the rejection of claim 26 should be withdrawn.

Because independent claim 26 is allowable, dependent claims 27 – 30 are also allowable for at least the reason that these claims contain all the features of independent claim 26. *See In re Fine, supra.* Accordingly, Applicant respectfully requests that the rejection of claims 27 - 30 also be withdrawn.

IV. Claim Rejections Under 35 U.S.C. § 103 – Claims 16 - 19

A. Statement of the Rejection

The Office Action indicates that claims 16 - 19 are unpatentable over *Roussel* in view of *Worley, Jr.*

B. Discussion of the Rejection

In order for a claim to be properly rejected under 35 U.S.C. §1'03, "[t]he PTO has the burden under section 103 to establish a *prima facie* case of obviousness. To

establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicant's claim 16, as amended, recites at least one element that is not disclosed, taught, or suggested by the proposed combination of *Roussel* with *Worley, Jr.* Specifically, the proposed combination does not show, teach, or suggest "a miscellaneous logic unit coupled between the result bus and the register, the miscellaneous logic unit configured to perform logical operations not requiring multiply accumulate functions, the miscellaneous logic unit further configured to generate first and second control signals responsive to at least one certain exceptional condition.

Roussel apparently describes execution units that perform ADD and MUL operations and execution units that perform operations on half width operands. *Worley, Jr.* apparently describes a multiplexor and a storage unit coupled to an instruction results bus that shows a conditional selection of one of two values. In this regard, the cited references (*i.e., Roussel* and *Worley, Jr.*) do not show Applicant's claimed miscellaneous logic unit configured to perform logical operations not requiring multiply accumulate functions. Thus, the cited references fail to meet the burden of disclosing, teaching, or suggesting each feature of Applicant's claimed invention. Consequently, for at least this reason, the rejection fails to establish a *prima facie* case of obviousness when applied to Applicant's claim 16 - 19. Accordingly, the claim rejections under 35 U.S.C. § 103 should be withdrawn.

CONCLUSION

For at least the reasons set forth above, Applicant respectfully submits that all rejections have been traversed, rendered moot, and/or accommodated, and that pending claims 2, 3, 5 - 17, and 21 - 30 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500 (ext. 258).

Respectfully submitted,

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